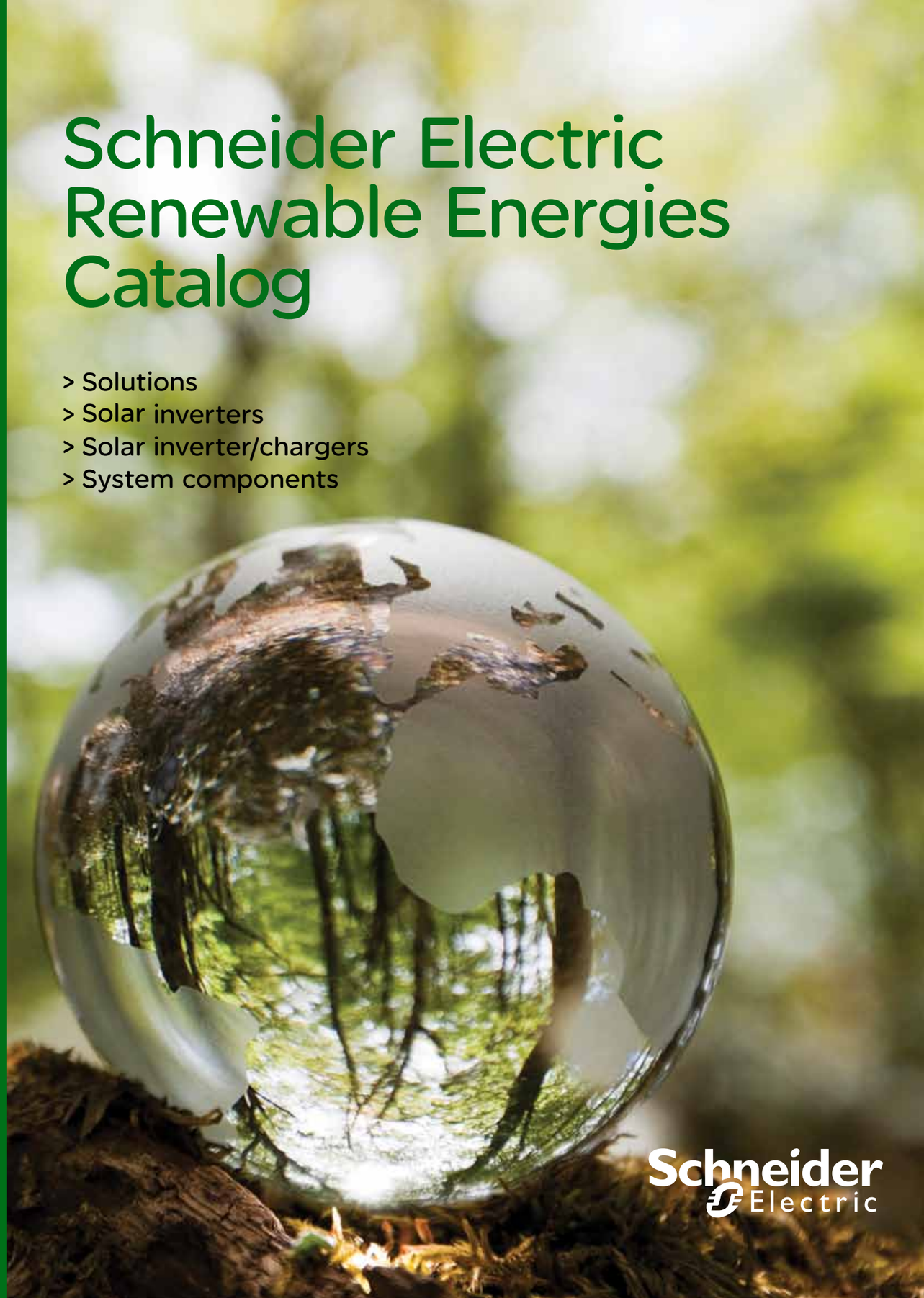
Make the most of your energy

Schneider Electric

For more information visit our website at: www.schneider-electric.co.in
Schneider Electric India Pvt. Ltd. (A 100% subsidiary of Schneider Electric Industries SAS)
Corporate office : 9th Floor, DLF Building No.10, Tower C, DLF Cyber City, Phase II,
Gurgaon - 122002, Haryana, Tel: 0124 3940400, Fax: 0124 4222036
Customer Care Centre : Toll-free numbers: 1800 180 1707, 1800 103 0011,
General number: 0124 4222040, Email: in-care@in.schneider-electric.com

Schneider Electric Renewable Energies Catalog

> Solutions
> Solar inverters
> Solar inverter/chargers
> System components



Schneider Electric

Contents

About Schneider Electric 2-3
Quality Policy 4

String inverters 5
Solar inverters (single-phase)
- Xantrex GT Series 6-7

Central inverters 8
Solar inverters (three-phase)
- Xantrex GT30 E 9-10
- Xantrex GT100 E 11-12
- Xantrex GT250 E, GT500 E and GT630 E 13-14

Off-grid and backup 15
Basic off-grid system 16-17
Solar inverter/chargers
- Xantrex TR Series 18-19
- Xantrex XW Series 20-21

Solar charge controllers
- Xantrex XW MPPT 60 150 22-23
- Xantrex XW MPPT 80 600 24-25
- Xantrex C12 PWM 26-27
- Xantrex C Series 28-29

Solar solution components and PV protection 30
- Xantrex Gateway 31-32
- Components 33-34
- Protection 35-36

Glossary of terms 37

All products shown in this catalog may not be exactly as shown.

The history of Schneider Electric

Schneider Electric, founded in 1836, has transformed itself into the global specialist in energy management. From its roots in the iron and steel industry, heavy machinery, and ship building, it moved into electricity and automation management. In the late 20th century the Schneider Group shifted its focus to the electrical industry by separating from its non-strategic activities and was solidified through its acquisitions of Telemecanique in 1988, Square D in 1991 and Merlin Gerin in 1992. In 1999 development of installation, systems and control was bolstered with the acquisition of Lexel, Europe's number two in electrical distribution. In May of the same year, the company was renamed Schneider Electric to more clearly emphasize its expertise in the electrical field.

From 2000 through 2009 Schneider Electric entered into a phase of organic growth and began positioning itself in new market segments: UPS (uninterruptible power supply), movement control, building automation and security and renewable energy through the acquisitions of APC, Clipsal, TAC, Pelco, Xantrex Technology and more.

As a global specialist in energy management with operations in more than 100 countries, Schneider Electric offers integrated solutions across multiple market segments, including leadership positions in energy and infrastructure, industrial processes, building automation, data centers/networks, as well as a broad presence in residential applications. Focused on making energy safe, reliable, efficient, productive and green, the company's 110,000 plus employees achieved sales of 19.6 billion Euros in 2010, through an active commitment to help individuals and organizations "Make the most of their energy™."

Renewable Energies

In October of 2008, with Schneider Electric's purchase of Xantrex Technology, a significant milestone was reached in the company's expansion into the renewable energies sector. Combining Xantrex's knowledge and expertise in renewable energies and Schneider Electric's depth of experience in energy management was critical for the future success of the organization in this space. The renewable energies business of Schneider Electric is focused on designing and developing renewable energy products and solutions and providing best-in-class, global customer service and technical support.

Make the most of your energy

Schneider Electric provides the full solution from the panel DC output to the grid connection, including monitoring & supervision.

For more information about Schneider Electric and renewable energy solutions, please visit www.schneider-electric.com/renewable-energies

At Schneider Electric's Renewable Energies Business, **customer satisfaction** is everyone's number one priority

- Providing outstanding solutions, products and services.
- Addressing customer issues professionally.
- Ensuring a consistent experience worldwide.
- Complying with the requirements.

> We are committed to bringing a differentiated and superior experience to our customers

- Giving precedence to customer satisfaction over any other priority.
- Listening with humbleness and acting on our customers' feedback.
- Delivering on our commitments.
- Communicating proactively and transparently.

> We develop an exemplary customer-centric culture

- Our managers lead by example.
- Our people enjoy autonomy and develop accountability.
- We plan, control and relentlessly improve with our business process excellence tools and methodologies.
- We recognize and share best practices and attitudes.

> We empower and train our people to make no compromise on quality

The ultimate measure of quality is customer satisfaction

Xantrex™ GT Series Grid Tie Solar Inverters

The Xantrex GT Series high performance PV string inverter offers high efficiency, lower installed cost, improved aesthetics and high reliability. The Xantrex GT Series Inverter is a high quality product that offers the best price/performance ratio on the market.

Features

- Superior PV energy harvest
- Peak inverter efficiency
- Excellent thermal performance
- IP54 enclosure
- Inverters can be mounted side by side with zero clearance
- LCD provides instantaneous information – power level, daily energy and lifetime production, system status, and installer customized screens

Xantrex™ GT Series

Device short name	GT2.8 SP	GT3.8 SP	GT5.0 SP
Electrical specifications			
Input (DC)			
Photovoltaic power	3.07 kW	4.18 kW	5.3 kW
Input voltage range, MPPT	195 to 550 V	195 to 550 V	240 to 550 V
Number of MPPT	1	1	1
Max. input voltage, open circuit	600 V	600 V	600 V
Max. input current	15.7 A	21.3 A	24 A
Max. input short circuit current	24 A	24 A	24 A
Output (AC)			
Nominal output power	2.5 kW	3.3 kW	5.0 kW
Output voltage	230 V, single phase	230 V, single phase	230 V, single phase
Frequency	50 Hz	50 Hz	50 Hz
Output current	14.5 A	19 A	23 A
Overcurrent protection	20 A	20 A	30 A
Power factor	>0.9	>0.9	>0.9
Harmonic distortion	< 3%	< 3%	< 3%
Topology	Transformer, isolated	Transformer, isolated	Transformer, isolated
Efficiency			
Peak	95.0%	95.3%	96.0%
European	94.0%	94.5%	95.2%
General specifications			
Power consumption, night time	< 1 W	< 1 W	< 1 W
IP degree of protection	IP54	IP54	IP54
Product weight	19.5 kg (42.99 lb)	20.0 kg (44.09 lb)	22.3 kg (49.16 lb)
Shipping weight	26 kg (57.2 lb)	26 kg (57.2 lb)	28.5 kg (62.7 lb)
Product dimensions (H x W x D)	59.7 x 40.3 x 13.6 cm (23.5 x 15.87 x 5.35 in)	59.7 x 40.3 x 13.6 cm (23.5 x 15.87 x 5.35 in)	59.7 x 40.3 x 13.6 cm (23.5 x 15.87 x 5.35 in)
Shipping dimensions (H x W x D)	72 x 57 x 25 cm (28.3 x 22.4 x 9.8 in)	71 x 58 x 24 cm (28 x 22.8 x 9.4 in)	72 x 56 x 25 cm (28.3 x 22 x 9.8 in)
Device mounting	Wall mount (mounting bracket included)		
Ambient air temperature for operation	-25ºC to 65ºC (-13ºF to 149ºF)	-25ºC to 65ºC (-13ºF to 149ºF)	-25ºC to 65ºC (-13ºF to 149ºF)
Part number	864-0105	864-0104	864-1029-01

Features and options

Type of cooling	Convection, fan not required
Display type	LCD, 2 lines 16 digits
Communication interface	Integrated RS232 and two Xanbus™ RJ45 communication ports

Regulatory approvals

CE marked according to the following EU directives and standards:	
EMC Directive	EN 61000-3-2, EN 61000-3-3, EN 61000-6-1, EN 61000-6-3
Low Voltage Directive	EN 50178 and EN 60529
Other approvals	Royal Decree RD 661-2007, RD 1663/2000

Specifications subject to change without notice.

Central inverters

Schneider Electric Xantrex™ GT30 E Grid Tie Solar Inverter

The three-phase Xantrex GT30 E Grid Tie Solar Inverter is a 30 kW high-performance inverter that makes utility-interactive installations easier and more cost effective. It offers superior PV energy harvest, easy installation, high reliability and a compact, ultra-lightweight design.

Features

- One of the highest efficiencies in the 30 kW class
- Rapid MPPT
- Lightweight and easy to install
- Multiple inverters are easily paralleled for large PV power plants
- Manufactured in Germany

Xantrex™ GT30 E

Electrical specifications

Input (DC)	
Photovoltaic power	35 kW
Input voltage range, MPPT	450 to 800 V
Max. input voltage, open circuit	840 V
Max. input current	77.4 A
Output (AC)	
Nominal output power	29.9 kW
Output voltage	400 V, three phase
Frequency	50/60 Hz
Nominal output current	43.2 A
Power factor	> 0.99 above 20% rated power
Harmonic distortion	< 4% at rated power
Topology	Integral high frequency transformer

Efficiency

Maximum	95.0% incl. transformer
European	94.2% incl. transformer

General specifications

Power consumption, night time	< 1 W
IP degree of protection	IP20
Enclosure material	Powder-coated aluminum
Product weight	80 kg (176.37 lb)
Product dimensions (H x W x D)	71 x 47.5 x 34.7 cm (27.95 x 18.70 x 13.66 in)
Device mounting	Prepared for wall mounting
Ambient air temperature for operation	0ºC to 50ºC (32ºF to 122ºF)
Operating altitude	Up to 1500 m (4921 ft) without de-rating
Relative humidity	0 to 95%, non-condensing
Part number	1-152632-01

Features and options

Type of cooling	Temperature-dependent forced convection cooling
Display type	LCD, 4 lines with keypad
Protective functions	AC over / under-voltage, AC over / under-frequency, over-temperature, AC and DC over-current, DC over-voltage and reverse polarity protection
Ground fault protection	DC isolation monitoring
Disconnect	AC contactor integral to inverter assembly
Output relays	Four relay contacts (three user-settable)
Communication interface	RS232/485, optional telephone modem for remote system monitoring

Regulatory approvals

Labeled with CE mark and complies with applicable European Directives:	
EMC Directive	EN61000-6-1, -2, -3, -4, EN61000-3-12
Low Voltage Directive	EN50178
The GT30 E complies with the requirements of VDEW and the Royal Decree, Spain	

Specifications are subject to change without notice.

Schneider Electric Xantrex™ GT100 E Grid Tie Solar Inverter

The Xantrex GT100 E Grid Tie Inverter is based on a reliable platform that is used in grid-connect photovoltaic and wind turbine applications in North America and Europe. Easy to install and operate, the GT100 E automates start up and shut down. It incorporates advanced Maximum Power Point Tracking Technology (MPPT) to maximize the energy harvested from a PV array. To minimize power losses during the conversion process, the inverter's switching technology uses insulated gate bi-polar transistors.

Features

- Digital Signal Processor (DSP) based controls with self-diagnostics and LCD for display of operating status
- Inverter shut off and disconnects
- Over- and under-voltage and frequency protection, shutting down the inverter
- Anti-islanding protection - prevents back-feeding inverter-generated power to the grid in the event of a utility outage
- User definable power tracking allows the user to match the inverter to the array, as well as to adjust delay periods to customize system shutdown sequences
- Graphical user interface software for real time communications, monitoring, and control
- Isolated design with integrated transformer
- Multiple inverters can be paralleled for large power installations

Options

- Insulation monitoring system
- Remote monitoring and fault notification via various communication options
- Warranty extensions and service contracts with uptime guarantees

Xantrex™ GT100 E

Electrical specifications

Input (DC)

Photovoltaic power	112 kW
Input voltage range, MPPT	300 to 650 V
Max. input voltage, open circuit	650 V
Max. input current	347 A

Output (AC)

Nominal output power	100 kW
Output voltage	400 V, three phase
Frequency	50 Hz, optional 60 Hz
Nominal output current	144 A
Power factor	> 0.99 above 20% rated power
Harmonic distortion	< 3% at rated power
Topology	Integral isolation transformer

Efficiency

Peak	96.6% incl. transformer
European	96.0% incl. transformer

General specifications

Power consumption, night time	93 W
IP degree of protection	IP21
Enclosure material	Steel
Product weight	870 kg (1918 lb)
Product dimensions (H x W x D)	190.5 x 120.5 x 60.6 cm (75 x 47.44 x 23.86 in)
Ambient air temperature for operation	-10ºC to 45ºC (14ºF to 113ºF)
Operating altitude	Up to 2000 m (6562 ft) without de-rating
Relative humidity	0 to 95% non-condensing
Part number	1-153417-02

Features and options

Type of cooling	Forced convection cooling
Display type	Four-line, 80-character VFD with a keypad
Protective functions	AC over / under-voltage, AC over / under-frequency, over-temperature, AC and DC over-current, DC over-voltage
AC/DC disconnect	Integral to inverter assembly
Communication interface	Modems (Ethernet or Wireless) for remote monitoring and faults notification

Regulatory approvals

The GT100 E is compliant to applicable European directives and CE marked:	
EMC Directive	EN61000-6-2, EN61000-6-4
The GT100 E complies with the requirements of Spain's RD1663 and RD661	

Specifications are subject to change without notice.

Schneider Electric Xantrex™ GT250 E, GT500 E, and GT630 E Grid Tie Solar Inverters

The Xantrex GT250 E, GT500 E and GT630 E Grid Tie Solar Inverters provide a competitive price and performance ratio, and feature the insulated gate bipolar transistor (IGBT) switching technology to reach a high efficiency level of 98.4%. These inverters can handle the most demanding grid interactive features while continuing to deliver maximum active power to the grid.

Features

- Digital Signal Processor (DSP) based controls with self-diagnostics
- LCD display with keypad for display of operating status and for access of user-changeable settings
- Over and under-voltage and frequency protection, shutting down the inverter
- User definable power tracking allows the user to match the inverter to the array, as well as to adjust delay periods to customize system shutdown sequences
- DC and AC surge protection
- Graphical user interface software for real time communications, monitoring and control
- Manufactured in Germany
- Five-year standard warranty

Options

- 1000 V Input for GT500 E / GT630 E
- Grid interactive features including low voltage ride through and reactive (VAR) power control for the GT500 E and GT630 E
- Insulation monitoring systems and positive or negative grounding kits
- Remote monitoring and faults notification via various communication options
- Warranty extensions and service contracts with uptime guarantees

Xantrex™ GT250 E, GT500 E, and GT630 E

Device short name	GT250 E	GT500 E	GT630 E
Electrical specifications			
Input (DC)			
Photovoltaic power	280 kW	560 kW	705 kW
Input voltage range, MPPT	450 to 800 V	450 to 880 V (495 to 880 V for grid interactive option, reduced current above 820 V)	575 to 880 V (reduced current above 820 V)
Max. input voltage, open circuit	880 V	930 V (1000 V optional)	930 V (1000 V optional)
Max. input current	555 A	1120 A	1120 A
Output (AC)			
Nominal output power	250 kW	500 kW	630 kW
Output voltage	315 V three phase	315 V three phase	375 V three phase
Frequency	50 Hz, optional 60 Hz	50 Hz, optional 60 Hz	50 Hz, optional 60 Hz
Nominal output current	460 A	1040 A	1040 A
Power factor	> 0.99 above 20% rated power	> 0.99 above 20% rated power (optional 0.93 leading to 0.93 lagging with grid interactive feature)	> 0.99 above 20% rated power (optional 0.93 leading to 0.93 lagging with grid interactive feature)
Harmonic distortion	< 3% at rated power	< 3% at rated power	< 3% at rated power
Efficiency			
Maximum	97.5%	98.1% (98.3% for grid interactive option)	98.4%
European	96.6%	97.6% (97.9% for grid interactive option)	98.2%
General specifications			
Power consumption, night time	< 100 W	< 100 W	< 100 W
IP degree of protection	IP20	IP20	IP20
Enclosure material	Steel	Steel	Steel
Product weight	1160 kg (2557.36 lb)	1770 kg (3902.18 lb) (without 1000 V option)	1770 kg (3902.18 lb) (without 1000 V option)
Product dimensions (H x W x D)	211.2 x 200.6 x 60.5 cm (83.15 x 78.98 x 23.82 in)	211.2 x 240.6 x 60.5 cm (83.15 x 94.72 x 23.82 in) (without 1000 V option)	211.2 x 240.6 x 60.5 cm (83.15 x 94.72 x 23.82 in) (without 1000 V option)
Ambient air temperature for operation	-10ºC to 45ºC (14ºF to 113ºF)	-10ºC to 45ºC (14ºF to 113ºF)	-10ºC to 45ºC (14ºF to 113ºF)
Operating altitude	Full power up to 1500 m (4921 ft), with power derating above 1500 m	Full power up to 1500 m (4921 ft), with power derating above 1500 m	Full power up to 1500 m (4921 ft) with power derating above 1500 m
Relative humidity	0 to 95% non-condensing	0 to 95% non-condensing	0 to 95% non-condensing
Part number	820-0029-02-01*	822-5005-00-00*	822-6305-00-00*

Features and options	
Type of cooling	Temperature-dependent forced convection cooling
Display type	LCD, 4 lines 20 digits with keypad
Protective functions	AC over / under-voltage, AC over / under-frequency, over-temperature, AC and DC over-current, DC over-voltage
AC/DC disconnect	Integral to inverter assembly
Combiner boxes	Optional feature (information on request)
Container solution	Optional feature (information on request)
Warranty	Five-year standard

Regulatory approvals

GT250 E, GT500 E and GT630 E are CE marked for the EMC Directive (EN61000-6-2 and EN61000-6-4) and Low Voltage Directive (EN50178)

GT500 E and GT630 E with grid-interactive options comply with German (EON, BDEW) and French (EDF) requirements

GT500 E complies with Spain's RD1663 and RD661

GT250 E, GT500 E and GT630 E comply with the requirements of Italy's ENEL DK5940

Specifications are subject to change without notice.
* Other options available upon request.

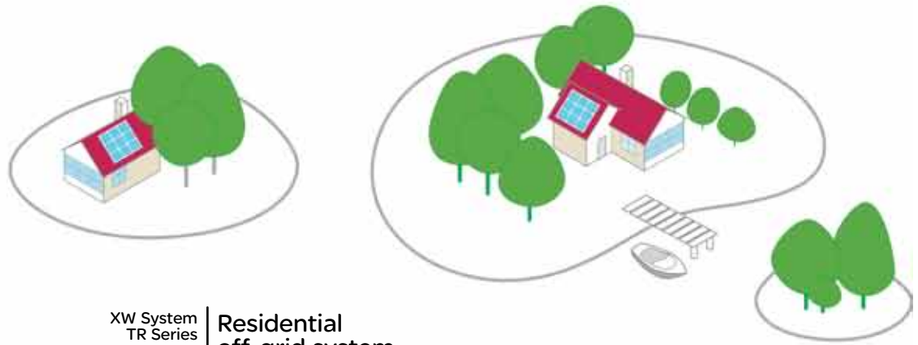
Off-grid and backup

Basic off-grid system

With an off-grid system, you can easily produce your own power without the expense and environmental impact of extending power lines, or relying completely on a generator.

A basic off-grid system consists of a renewable energy source which generates DC power, a battery bank that stores the DC power, and an inverter. Our inverter is the intelligent center of a renewable power system, seamlessly converting DC power to clean AC electricity for your needs.

With a backup system, grid-connected homes can benefit from electricity even if there is a grid failure. An inverter/charger automatically detects the failure and switches to backup power using energy stored in a battery bank.



XW System
TR Series
Residential
off-grid system

XW System
TR Series
Residential
backup system

Schneider Electric Xantrex™ TR Series Inverter/Chargers (230 V / 50 Hz)

The Xantrex TR Series Inverter/Charger is an economical power conversion solution available in a wide range of modified sine-wave output voltages and power levels. The Xantrex TR is an excellent choice for off-grid applications, or to deliver dependable backup power to essential circuits in a home or business during a power outage.

Features

- 1500 VA and 2400 VA models
- 230 V / 50 Hz models
- 12 Vdc and 24 Vdc models
- New digital display shows kilowatts (kW) when inverting and amps (A) when charging, plus incorporates a robust ON/OFF membrane switch and status indicators
- New power factor corrected (PFC) charging, combined with a more sophisticated multi-stage battery charging algorithm, reduces current draw and generator run-time
- Simplified controls with a snap-on cover that protects settings from being accidentally changed
- Improved thermal performance allows full output power to 50°C without de-rating
- High surge capacity starts difficult loads and handles overload conditions
- Circuit boards are conformally-coated to protect them from corrosion for longer life and improved reliability
- Durable powder coated, corrosion resistant steel chassis
- Two-year standard warranty

Components

- TR-Remote On/Off Switch – includes LED status indicator
- TR-Conduit Box – connects to the DC side of the inverter and accepts 2 cm, 2.5 cm or 5 cm conduit

Xantrex™ TR Series (230 V / 50 Hz)

Device short name	TR1512 230 50	TR1524 230 50	TR2424 230 50
Electrical specifications			
Continuous output power	1.5 kVA	1.5 kVA	2.4 kVA
Output voltage	230 V	230 V	230 V
Frequency	50 Hz	50 Hz	50 Hz
Output current	6.4 A	6.4 A	10.4 A
Surge capability max. output & duration: Overload 10 sec rating Short circuit 10 sec rating	 3000 VA 26.5±2.5 Apk	 3000 VA 26.5±2.5 Apk	 4800 VA 42±4 Apk
Adjustable load sensing range	10 W minimum to 480 W maximum	10 W minimum to 480 W maximum	10 W minimum to 480 W maximum
Type of signal (invert mode)	Modified sine wave	Modified sine wave	Modified sine wave
DC input current at no load (search mode)	0.35 A	0.20 A	0.20 A
DC input voltage limits	11 to 15 V	22 to 30 V	22 to 30 V
Rated DC input current	158 A	77 A	121 A
Load power factor (allowed)	0.8 to 1.0 (leading or lagging)	0.8 to 1.0 (leading or lagging)	0.8 to 1.0 (leading or lagging)
Series operation	No	No	No
AC input voltage limits (bypass/charge mode)	120 to 253 V (wide), 180 to 253 V (narrow),	120 to 253 V (wide) 180 to 253 V (narrow)	120 to 253 V (wide) 180 to 253 V (narrow)
Input frequency	45 to 55 Hz (narrow-charge & pass-through) 45 to 68 Hz (wide-charge) 41 to 68 Hz (wide pass-through)		
Built-In internal supplemental breakers	15 A bypass, 8 A charger	15 A bypass, 8 A charger	15 A bypass, 15 A charger
Charging current (adjustable)	10 to 70 A	5 to 35 A	10 to 70 A
AC input current at max. charge rate	5.9 A	6.0 A	10.4 A
Charger power factor	0.91	0.83	0.92
Multi-stage charging	Yes – bulk, absorption and float, plus user-initiated equalize (for flooded batteries only)		
Temperature compensation	Battery temperature sensor included	Battery temperature sensor included	Battery temperature sensor included
Automatic transfer relay	15 A	15 A	15 A
Transfer time (typical)	< 40 ms (wide), < 20 ms (narrow)	< 40 ms (wide), < 20 ms (narrow)	< 40 ms (wide), < 20 ms (narrow)
Efficiency			
Peak	> 92%	> 91%	> 94%
General specifications			
Product weight	19 kg (42 lb)	19 kg (42 lb)	19 kg (42 lb)
Shipping weight	23.6 kg (52 lb)	23.6 kg (52 lb)	23.6 kg (52 lb)
Product dimensions (H x W x D)	18.4 x 21.6 x 54.6 cm (7.2 x 8.5 x 21.5 in)	18.4 x 21.6 x 54.6 cm (7.2 x 8.5 x 21.5 in)	18.4 x 21.6 x 54.6 cm (7.2 x 8.5 x 21.5 in)
Shipping dimensions (H x W x D)	30 x 31.5 x 67.5 cm (11.8 x 12.4 x 26.6 in)	30 x 31.5 x 67.5 cm (11.8 x 12.4 x 26.6 in)	30 x 31.5 x 67.5 cm (11.8 x 12.4 x 26.6 in)
Device mounting	Wall mount (with 16 in mounting centers)	Wall mount (with 16 in mounting centers)	Wall mount (with 16 in mounting centers)
Ambient air temperature for operation	0°C to 50°C (32°F to 122°F)	0°C to 50°C (32°F to 122°F)	0°C to 50°C (32°F to 122°F)
Warranty	Two-year standard	Two-year standard	Two-year standard
Part number	989-1025	989-1030	989-1035
Optional components			
Xantrex TR Conduit Box (989-1050)	Connects to the DC side of the inverter and accepts 3/4, 1 or 2 inches conduit		
Xantrex TR Remote On/Off Switch (989-1060)	Includes LED status indicator		
Regulatory approvals			
CE Marked and compliant with Europe's EMC Directive (EN61000-6-1, -6-3, -3-2, and -3-3) and Low Voltage Directive (EN50178)			

Specifications are subject to change without notice.

Schneider Electric Xantrex™ XW Inverter/Charger

The Schneider Electric Xantrex XW inverter/charger features sine-wave power and advanced battery charging technology. The product line offers inverter/chargers in power levels from 4 kW to 6 kW in an expandable configuration allowing for future system growth in either single or three-phase applications up to 36 kW. The products can be used in either a grid-tied with battery backup or off-grid application to suit a wide variety of installations.

Features

- True sine-wave output
- 230 V / 50 Hz Models
- 24 V models rated at 4000 VA and 48 V models rated at 4500 VA or 6000 VA
- High surge capacity – Full 200% rated output power is delivered to loads
- All models suitable for off-grid or hybrid/backup power applications
- Single-phase (230 V / 50 Hz) and three-phase (230/400 V / 50 Hz) configurations possible
- Up to four inverters can be installed in parallel to create larger single-phase systems up to 24 kVA
- Up to two inverters per phase can be connected for three-phase installations up to 36 kVA
- Dual AC inputs (grid and generator) with automatic transfer; external transfer switch not required
- Efficient, power factor corrected, high-current, multistage battery charging
- Configurable auxiliary output
- Non volatile memory stores parameter settings
- Full control of generator with optional automatic generator start (AGS)
- CE marked
- Mounting bracket included
- Local LED display on inverter shows output power, charge current and battery level, to provide system status at-a-glance
- Xanbus™ Network provides plug-and-play networking

Xantrex™ XW Series (230 V / 50 Hz)

Device short name	XW6048 230 50	XW4548 230 50	XW4024 230 50
Electrical specifications			
Continuous power	6.0 kVA	4.5 kVA	4.0 kVA
Surge rating	12.0 kVA (15 sec)	9.0 kVA (20 sec)	8.0 kVA (20 sec)
Output current	26.1 A	19.6 A	17.4 A
Peak output current	53 A	40 A	35 A
Input current at rated power	131 A	96 A	178 A
Type of signal	True sine wave	True sine wave	True sine wave
Automatic transfer relay	56 A	56 A	56 A
Typical transfer time	8 ms	8 ms	8 ms
DC input voltage (nominal)	50.4 V	50.4 V	25.2 V
Input voltage limits	44 to 64 V	44 to 64 V	22 to 32 V
Charging current	100 A	85 A	150 A
Power factor corrected charging	0.98	0.98	0.98
Auxiliary relay output	0 to 12 V, maximum 250 mA DC	0 to 12 V, maximum 250 mA DC	0 to 12 V, maximum 250 mA DC
Power consumption (search mode)	< 7 W	< 7 W	< 7 W
AC input voltage (nominal)	230 V +/- 3%	230 V +/- 3%	230 V +/- 3%
Input voltage limits (bypass/charge mode)	165 to 280 V (230 V nominal)	165 to 280 V (230 V nominal)	165 to 280 V (230 V nominal)
Frequency	50 Hz +/- 0.1 Hz	50 Hz +/- 0.1 Hz	50 Hz +/- 0.1 Hz
AC input frequency range (bypass/charge mode)	40 to 68 Hz (50 Hz nominal)	40 to 68 Hz (50 Hz nominal)	40 to 68 Hz (50 Hz nominal)
Total harmonic distortion (THD)	< 5% at rated power	< 5% at rated power	< 5% at rated power
AC connections	AC1 (Grid), AC2 (Generator)	AC1 (Grid), AC2 (Generator)	AC1 (Grid), AC2 (Generator)
AC input breaker	60 A single-pole	60 A single-pole	60 A single-pole
Utility interactive	Disabled	Disabled	Disabled
Efficiency			
Peak	95.4%	95.6%	94.0%
General specifications			
IP degree of protection	IP20 (sensitive electric components sealed inside enclosure)		
Product weight	55.2 kg (121.7 lb)	53.5 kg (118 lb)	52.5 kg (116 lb)
Shipping weight	76.7 kg (169 lb)	75 kg (165 lb)	74 kg (163 lb)
Product dimensions (H x W x D)	58 x 41 x 23 cm (23 x 16 x 9 in)	58 x 41 x 23 cm (23 x 16 x 9 in)	58 x 41 x 23 cm (23 x 16 x 9 in)
Shipping dimensions (H x W x D)	71.1 x 57.2 x 39.4 cm (27.99 x 22.52 x 15.51 in)	71.1 x 57.2 x 39.4 cm (27.99 x 22.52 x 15.51 in)	71.1 x 57.2 x 39.4 cm (27.99 x 22.52 x 15.51 in)
Device mounting	Wall mount (backplate included)	Wall mount (backplate included)	Wall mount (backplate included)
Ambient air temperature for operation	-25°C to 70°C (-13°F to 158°F) (power derated above 45°C (113°F))		
Communication network type	Xanbus™	Xanbus™	Xanbus™
Part number	865-1035	865-1040	865-1045
Features and options			
Display type	Status LEDs indicate AC In status, faults/warnings, equalize mode, On/Off and equalize button battery level. Three-character display indicates output power or charge current		
Supported battery types	Flooded (default), Gel, AGM, custom	Flooded (default), Gel, AGM, custom	Flooded (default), Gel, AGM, custom
Battery bank size	100 to 2000 Ah (scaled to PV array size)		
Battery temperature sensor	Included	Included	Included
Non volatile memory	Yes	Yes	Yes
Multiple unit configurations	Single-phase: up to four parallel units. Three-phase: two units per phase		
Optional components (see page 72 for more details)			
Xantrex XW Remote display (865-1050)	XW SCP monitors and configures all devices connected to Xanbus Network		
Xantrex XW Generator support (865-1060)	XW AGS module connects to Xanbus Network. Automatically activates generator to recharge depleted battery bank or assist inverter with heavy loads		
Xantrex XW Conduit Box (865-1025)	XW CB encloses the bottom of the inverter and protects the cabling. Provides knockouts for 2 cm, 2.5 cm, 3.2 cm, 6 cm, and 6.5 cm conduit		
Xantrex XW MPPT 60 150 (865-1030-1) (page 60) Xantrex XW MPPT 80 600 (865-1032) (page 62)	XW MPPT Solar Charge Controller with MPPT delivers the maximum energy available from the PV array to the battery bank		
Xantrex XW Configuration Tool (865-1155)	Xantrex XW Configuration Tool aids dealers and installers by simplifying and expediting the configuration and/or troubleshooting of a Xantrex XW System		
Regulatory approval			
CE marked according to the following EU directives and standards:			
EMC Directive	EN61000-6-1, EN61000-6-3, EN61000-3-2, EN61000-3-3		
Low Voltage Directive	EN50178		

Specifications are subject to change without notice.

Schneider Electric Xantrex™ XW MPPT 60 150 Solar Charge Controller

The Xantrex XW MPPT 60 150 is a photovoltaic (PV) charge controller that tracks the maximum power point of a PV array to deliver the maximum available current for charging batteries. When charging, the Xantrex XW MPPT 60 150 regulates battery voltage and output current based on the amount of energy available from the PV array and state-of-charge of the battery.

Features

- Can be used with 12, 24, 36, 48, and 60 V battery systems and is able to charge a lower nominal voltage battery from a higher nominal voltage array
- Maximum Power Point Tracking (MPPT) algorithm continually seeks the maximum power available from the PV array
- Integrated PV ground fault protection for negative grounded arrays
- Convection-cooled design does not require a cooling fan – large, aluminum, die-cast heat-sink allows full output current up to 45°C without thermal derating
- Selectable two or three-stage charging algorithms with manual equalization to maximize system performance and improve battery life
- Configurable auxiliary output
- 2 lines 16 digit LCD and four buttons for configuration and system monitoring
- Input over-voltage and under-voltage protection, output over-current protection, and backfeed (reverse current) protection (warning and fault messages appear on LCD when unit shuts down as a protective measure)
- Can also be used with other battery-based solar energy systems
- Over-temperature protection and power derating when output power and ambient temperature are high
- Battery Temperature Sensor (BTS) included – automatically provides temperature compensated battery charging
- Xanbus™-enabled network communications protocol
- Five-year standard warranty

Xantrex™ XW MPPT 60 150

Device short name	XW MPPT 60 150
Electrical specifications	
Nominal battery voltage	12, 24, 36, 48, 60 V
Max. PV array voltage (operating)	140 V
Max. PV array open circuit voltage	150 V including temperature correction factor
Max. array short-circuit current	60 A (48 A @ STC)
Max. charge current	60 A
Max. and min. wire size in conduit	#6 AWG to #14 AWG (10 to 2.5 mm²)
Charger regulation method	Three-stage (bulk, absorption, float) plus manual equalization Two-stage (bulk, absorption) plus manual equalization
General specifications	
Power consumption, night time	2.5 W
Enclosure material	Indoor, ventilated, sheet metal chassis with 2.2 cm and 2.8 cm (7/8 in and 1 in) knockouts and aluminium heat-sink
Product weight	4.8 kg (10.75 lb)
Shipping weight	8 kg (17.6 lb)
Product dimensions (H x W x D)	36.8 x 14.6 x 13.8 cm (14.5 × 5.75 × 5.5 in)
Shipping dimensions (H x W x D)	48.3 x 22.9 x 35 cm (19 × 9 × 9.75 in)
Device mounting	Vertical wall mount
Ambient air temperature for operation (full power)	-20°C to 45°C (-4°F to 113°F)
Storage temperature range	-40°C to 85°C (-40°F to 185°F)
Operating altitude	Sea level to 2000 m (6562 ft)
Warranty	Five-year standard
Part number	865-1030-1
Features and options	
Display type	LCD, 2 lines 16 digits
Regulatory approvals	
Safety	CSA Certified (UL1741 rev. 2005, CSA 107.1) and CE Marked for the Low Voltage Directive (EN50178)
EMC	FCC and Industry Canada (Class B) and CE Marked for the EMC Directive (EN61000-6-1, -6-3)

Specifications are subject to change without notice.

Schneider Electric Xantrex XW SCP

Schneider Electric Xantrex™ XW MPPT 80 600 Solar Charge Controller

The XW MPPT 80 600 is an innovative solar charge controller that offers an industry-first set of features: high PV input voltage (up to 600 Vdc), Maximum Power Point Tracking (MPPT), and 80 A charge current. 600 Vdc PV input voltage delivers lower installation costs through fewer PV strings, longer home runs, smaller wiring and conduit, and virtual elimination of PV combiner boxes and circuit breakers. MPPT technology helps harvest the most energy available from the PV array, regardless of environmental conditions. 80 A battery charge current allows for connection of arrays rated at up to 4800 W (48 V battery bank).

Features

- Accepts array voltages up to 600V, increasing installation flexibility and reducing installation cost
- MPPT to improve energy harvest over a wide range of environmental conditions
- 80 A charge current from large PV arrays with just two strings
- Charges 24 V or 48 V battery banks
- Full output power at 45ºC without derating (2560 W for 24 V systems, 4800 W for 48 V systems)
- Configurable for positive, negative, and ungrounded PV systems
- Integrated PV ground fault protection
- Configurable Auxiliary output
- Input over-voltage and under-voltage protection, output over current protection, and backfeed (reverse current) protection
- Over-temperature protection and power derating when ambient temperatures are high
- Battery Temperature Sensor (BTS) included – automatically provides temperature compensated battery charging
- Xanbus™–enabled network communications protocol allows settings and activity to be communicated to other Xanbus-enabled devices, such as the XW Hybrid Inverter/Charger, the XW System Control Panel (SCP), XW Automatic Generator Start (XW AGS) and other XW Solar Charge Controllers
- Provides on-board Xanbus™ network power for use in stand-alone applications with communications gateway
- Can be installed in a stand-alone mode with XW System Control Panel (XW SCP) (sold separately)
- Five-year standard warranty

Xantrex™ XW MPPT 80 600

Device short name	XW MPPT 80 600
Electrical specifications	
Nominal battery voltage	24 and 48 V (Default is 48 V)
Max. PV array voltage (operating)	195 to 550 V
Max. PV array open circuit voltage	600 V including temperature correction factor
Array short-circuit current	35 A (28 A @ STC)
Max. charge current	80 A
Max. and min. wire size in conduit	#6 AWG to #14 AWG (13.5 to 2.5 mm^2)
Charger regulation method:	Three-stage (bulk, absorption, float) plus manual equalization Two-stage (bulk, absorption) plus manual equalization
General specifications	
Power consumption, night time	< 1 W
Enclosure material	Indoor, ventilated, aluminum sheet metal chassis with 22.22 mm and 27.76 mm (7/8 in and 1 in) knockouts and aluminum heat sink
Product weight	13.5 kg (29.8 lb)
Shipping weight	17.4 kg (38.3 lb)
Product dimensions (H x W x D)	76 × 22 × 22 cm (30 × 8.625 × 8.625 in)
Shipping dimensions (H x W x D)	87 × 33 × 27 cm (34.3 × 13 × 10.6 in)
Device mounting	Vertical wall mount
Ambient air temperature for operation	-20°C to 65°C (-4°F to 149°F), power derating above 45°C
Storage temperature range	-40°C to 85°C (-40°F to 185°F)
Operating altitude	Sea level to 2000 m (6562 ft)
Warranty	Five-year standard
Part number	865-1032
Regulatory approvals	
Certified to UL1741: 2nd Ed and to CSA 107.1-01	

Specifications are subject to change without notice.

Schneider Electric Xantrex™ C12 PWM Charge Controller

The Xantrex C12 PWM charge, lighting, or load controller is uniquely sophisticated. As a charge controller, it features three-stage charging, user definable voltage parameters, and automatic equalization. Standard in the Xantrex C12 PWM's load control circuitry are field adjustable low voltage disconnect and reconnect points, along with a five minute low battery disconnect warning. The Xantrex C12 PWM also functions as a lighting controller. Lighting run time is adjustable from two to eight hours or can be set from dusk to dawn operation. It is used worldwide in a variety of applications, including remote village lighting systems and automatic outdoor lighting. An optional battery temperature sensor ensures precise battery charging regardless of battery temperature fluctuations.

Features

- Silent, pulse width modulated microprocessor control (maximizing battery life)
- Field adjustable voltage and battery set points
- Electronic protection against short-circuit, overload, over-temperature and reverse polarity conditions
- Two-year standard warranty

Xantrex™ C12 PWM

Device short name	C12 PWM

Electrical specifications

Rated PV current	12 A at 12 V only
Max. DC load	12 A with auto reset
Min. operating voltage	6 V
Max. voltage drop (PV to battery)	0.3 V
Max. voltage drop (battery to DC load)	0.5 V
Regulation setting	13 to 15 V
Equalize setting	Bulk plus 1 volt for two hours
Max. stranded wire size	#10 AWG stranded (5.2 mm^2)
Typical consumption while charging	0.007 A
Typical consumption with load disconnected	0.003 A

General specifications

Power consumption, night time	0.003 A
Enclosure material	Powder coated steel with strain relief for wiring and knockouts for up to 3.5 in conduits
Product weight	0.9 kg (1.98 lb)
Shipping weight	1.13 kg (2.49 lb)
Product dimensions (H x W x D)	16.5 x 11 x 4 cm (6.5 x 4.33 x 1.57 in)
Shipping dimensions (H x W x D)	20.3 x 11.7 x 4 cm (7.99 x 4.61 x 1.57 in)
Device mounting	Vertical wall mount – indoor only
Ambient air temperature for operation	0°C to 40°C (32°F to 104°F)
Warranty	Two-year standard
Part number	C12 – charge controller

Features and options

Regulation method	Standard – three-stage (bulk, absorption, and float), solid state, pulse width modulation
Field adjustable control setpoints	Standard – removable knobs and calibrated scales
Setting protection	Standard – knobs can be removed to prevent tampering
Testpoints	Standard – provided for each setting
Automatic equalization	Standard – every 30 days or after voltage reaches low voltage disconnect – can be disabled
External battery temperature compensation	Optional – battery temperature sensor (BTS)
Short circuit protection	Standard – fully electronically protected with auto reset and manual reset switch, protects both the loads and PV array from damage from short circuits – a fuse for the battery is still advised to protect the battery wires if located separately
Reverse polarity protection	Standard – fully protected
Low voltage disconnect	Standard – adjustable automatic or manual operation, manual reconnection includes warning flash of loads five minutes before and a ten minute grace period

Regulatory approvals

CE marked for the Low Voltage Directive and EMC Directive

Specifications are subject to change without notice.

Schneider Electric Xantrex™ C Series Controller

The Xantrex C35 PWM and C60 PWM are field configurable for 12- and 24- V operation. The Xantrex C40 PWM may be configured for 12-, 24-, or 48- V operation. All can be used as a charge, diversion, or load controller and come with a standard multi-color charge status LED.

Features

- Silent, pulse width modulated microprocessor control (helping to maximize battery life)
- Field adjustable voltage and battery type set points
- Electronic protection against short-circuit, overload, over-temperature, and reverse polarity conditions
- Two-year standard warranty

C Series

- CM: Cumulative amp hour meter
- CM/R: Remote cumulative amp hour meter (available in 50 or 100 foot lengths)
- BTS: Battery temperature sensor

Optional components:

CM and CM/R Digital Meter or Remote Display

This digital meter mounts onto the front of a charge controller or as a remote it can be installed up to 31 m away. It displays volts, amps, and resettable cumulative amp hours for a solar array, DC loads, or diversion loads, depending on the application. The CM/R comes with 15 or 30.5 m communication cable for remote installation.

Xantrex™ C Series

Device short name	C35 PWM	C40 PWM	C60 PWM
Electrical specifications			
Rated PV current	35 A	40 A	60 A
Charging / load current @ 25°C (77°F)	35 A	40 A	60 A
Voltage configurations	12 and 24 V	12, 24, and 48 V	12 and 24 V
Max. PV open circuit array voltage	55 V	125 V	55 V
Max. voltage drop through controller	0.30 V	0.30 V	0.30 V
Total operating consumption	15 mA	15 mA	15 mA
Recommended breaker size	60 A rated at 100% continuous duty	60 A rated at 100% continuous duty	60 A rated at 100% continuous duty
Recommended wire size	#6 AWG rated at 90°C (194°F)	#6 AWG rated at 90°C (194°F)	#6 AWG rated at 90°C (194°F)
Lead acid battery settings	Adjustable	Adjustable	Adjustable
NiCd battery settings	Adjustable	Adjustable	Adjustable
Load control mode	Low voltage reconnect – adjustable (sticker provided with unit) all models Low voltage disconnect – user selectable manual or automatic reconnection – (includes warning flash before disconnect and provides a one time, user selected grace period) all models		
General specifications			
Power consumption, night time	3 mA	3 mA	3 mA
Enclosure material	Indoor, ventilated, powder coated steel with 2 cm and 2.5 cm knockouts	Indoor, ventilated, powder coated steel with 2 cm and 2.5 cm knockouts	Indoor, ventilated, powder coated steel with 2 cm and 2.5 cm knockouts
Product weight	1.2 kg (2.65 lb)	1.4 kg (3.09 lb)	1.4 kg (3.09 lb)
Shipping weight	1.4 kg (3.09 lb)	1.6 kg (3.53 lb)	1.6 kg (3.53 lb)
Product dimensions (H x W x D)	20.3 x 12.7 x 6.4 cm (7.99 x 5 x 2.52 in)	25.4 x 12.7 x 6.35 cm (10 x 5 x 2.5 in)	25.4 x 12.7 x 6.35 cm (10 x 5 x 2.5 in)
Shipping dimensions (H x W x D)	31.5 x 17.8 x 6.4 cm (12.4 x 7.01 x 2.52 in)	31.5 x 17.8 x 6.4 cm (12.4 x 7.01 x 2.52 in)	31.5 x 17.8 x 6.4 cm (12.4 x 7.01 x 2.52 in)
Device mounting	Vertical wall mount – indoor only	Vertical wall mount – indoor only	Vertical wall mount – indoor only
Ambient air temperature for operation	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)
Operating altitude	4572 m (15000 ft)	4572 m (15000 ft)	4572 m (15000 ft)
Non-operating altitude	15240 m (50000 ft)	15240 m (50000 ft)	15240 m (50000 ft)
Warranty	Two-year standard	Two-year standard	Two-year standard
Part number	C35, C40, C60 – charge controllers CM – Front display panel CM/R-50, CM/R-100 – Remote display panel BTS – Battery temperature sensor		
Features and options			
Display type	CM, CM/R-50, or CM/R-100 – optional LCD – backlit, alphanumeric display showing battery voltage, DC amperage, cumulative amp hours, and amp hours since last reset – remote includes 15 or 30.5 m (49 or 100 ft) cable		
Regulation method	Solid state, three-stage (bulk, absorption, and float), pulse width modulation		
Field adjustable control setpoints	Two user adjustable voltage setpoints for control of loads or charging sources – settings retained if battery is disconnected		
Equalization charge	User selectable manual or automatic equalization – every 30 days		
Battery temperature sensor	BTS – optional remote battery temperature sensor for increased charging precision		
Regulatory approvals			
Safety	UL Listed to UL1741 and CSA 14; CE Marked for the Low Voltage Directive		
EMC	FCC and Industry Canada Class B, CE Marked for the EMC Directive		

Specifications are subject to change without notice.

Solar solution components and PV protection

Schneider Electric Xantrex™ Gateway

The Xantrex Gateway bridges the gap between a Xantrex GT or XW System and the system owner's computer, making it the central component for a residential or small commercial remote monitoring system.

The Xantrex Gateway logs performance data directly from the Xantrex GT or XW System, and transmits it to the included widget-based monitoring software for a simple and graphically rich view of system performance. More than a data logger, the Xantrex Gateway offers a web page with the ability to configure automated email reports and fault status to the user or installer.

The Xantrex Gateway includes both built-in Wi-Fi and Ethernet connectivity allowing for flexible and simple set up for wireless or wired connection to a router or direct to a PC.

The Xantrex Gateway logs and transmits performance data including:

- System power production
- Inverter specific power production
- Lifetime energy production; daily, weekly, monthly energy production graphs
- Inverter faults with date and time stamp

Features

- Can monitor a network consisting of up to 20 single phase GT inverters or up to eight Xantrex XW devices (Xantrex XW Inverter/Charger(s), Xantrex XW MPPT Solar Charge Controller(s), Xantrex XW SCP, and Xantrex XW AGS)
- Wi-Fi/Ethernet module with 10/100 Base-T or 802.11 b/g
- Can be configured to send energy and alarm reports via email
- Graphical interactive solar monitoring software
- Embedded web page for configuring the Xantrex Gateway and upgrading inverter firmware
- 16 megabytes of storage

Xantrex™ Gateway

Electrical specifications

Communication	Physical layer 2, CAN
Communication protocol	Xanbus™
Max. Xanbus cable length	40 m (131 ft)
Max. Ethernet cable length	60 m (197 ft)
Connectors	3 RJ45 – 8 pins (two Xanbus, one Ethernet)

Communication specifications

Ethernet	IEEE Std 802.3-2005™
Wireless	802.11.4b and 802.11.4g; WEP and WPA security Channels 1-11 (US/Canada), 1-9 (Europe)

General specifications

Product weight	0.21 kg (0.46 lb)
Product dimensions (H x W x D)	11.2 x 19.0 x 45 cm (4.41 x 7.48 x 17.72 in)
Height including antenna	24.9 cm (9.8 in)
Part number	865-1056

Regulatory approvals

North America	EMC FCC and Industry Canada class B	
Europe	Safety EMC Telecom	Low Voltage Directive EN 60950-1 EMC Directive EN 55022, EN 55024 R&TTE Directive, ETSI EN 301 489-1, ETSI EN 301 489-17

Specifications are subject to change without notice.

Schneider Electric Xantrex™ XW System components

Schneider Electric Xantrex™ XW SCP*

(865-1050)

The Xantrex XW System Control Panel features a graphical, backlit LCD display that provides system configuration and diagnostic information for devices connected to the Xanbus™-enabled network. The XW SCP gives a single point of control to setup and monitor an entire system, which may consist of multiple Xantrex XW Inverter/Chargers, Xantrex XW MPPT Solar Charge Controllers and other components.

Schneider Electric Xantrex™ XW AGS*

(865-1060)

The Xantrex XW Automatic Generator Start will automatically activate a generator to provide an Xantrex XW Inverter/Charger with power to recharge a depleted battery bank or provide additional power for heavy loads. The XW AGS adds intelligence to generator management, thereby eliminating time spent monitoring batteries and inverter loads.

Schneider Electric Xantrex™ XW CB

(865-1025)

The Xantrex XW Conduit Box, is a bare conduit box (no wires) that can be used to create systems larger than two inverters, or to retrofit Xantrex XW Inverters into existing systems which may already have AC/DC disconnects.

Schneider Electric Xantrex™ XW CK

(865-1020)

The Xantrex XW Connection Kit is a wiring kit and conduit box used to connect a second inverter to a Xantrex XW Power Distribution Panel. All wires are measured, pre-cut and labeled to facilitate quick and easy installation.

Schneider Electric Xantrex™ XW PDP

(865-1015)

The Xantrex XW Power Distribution Panel which comes with a conduit box is factory-wired and labeled to support a code-compliant single-inverter installation. Internal wiring and breakers can be added to expand the XW System with up to three inverters, four charge controllers, or other equipment to support larger systems.

Schneider Electric Xantrex™ XW CT

(865-1155)

The Xantrex XW Configuration Tool is a PC-based tool (application and network adapter) that provides for versatile XW system analysis, configuration, and recording of system- and individual component (XW Inverter/Charger, XW Charge Controller, XW AGS) settings. Tool wizards enhance the configuration process, the Xantrex XW CT can be used to update component firmware – right in the field!

*** Meets regulatory approvals:**
CSA Certified (UL458 and CSA 107.1)
EMC Directive: FCC and Industry Canada Class B, and CE marked for the EMC Directive (EN61000-6-1, -6-3).

Photovoltaic installations components

Schneider Electric Solar Disconnect Switch

(REHU393IP (3 Poles, 100 Amps), REHU493IP (4 Poles, 100 Amps), REHU394IP (3 Poles, 200 Amps), REHU494IP (4 Poles, 200 Amps))

The 1000 VDC disconnect switch functions as a local disconnect for a string of PV panels and is IEC 60947 compliant for use in Photovoltaic Systems at a maximum of 1000 VDC. This compact disconnect is available in both 100 and 200 amp, three-pole and four-pole versions.

Single or multi-inverter PV system components

Schneider Electric Xantrex™ GT SIM*

(864-0203)

The Xantrex Grid Tie Solar Inverter Monitor features a graphical, backlit LCD screen to monitor your single or multi-inverter PV system in one convenient location inside the home. The Xantrex GT SIM is a simple means of monitoring your solar system, with its large keypad buttons, an intuitive on-screen menu system, and plain text status messages to make the monitor easy to read and use. The monitor easily connects to Xantrex GT Series inverters using standard CAT5 Ethernet cable that also provides power to the monitor. Built-in flash memory stores PV system data and makes software upgrades simple.

Xantrex™ C Series Charge Controller components

Schneider Electric Xantrex™ BTS

(130-0004)

The Xantrex Battery Temperature Sensor mounts on your battery and measures its temperature. It sends precise information to an Inverter/Charger or Charge Controller, which automatically adjusts charging voltage to ensure full battery charge, regardless of the ambient temperature of your battery installation.

*** Meets regulatory approvals:**
CSA Certified (UL458 and CSA 107.1)
EMC Directive: FCC and Industry Canada Class B, and CE marked for the EMC Directive (EN61000-6-1, -6-3).

DC circuit protectors for Photovoltaic installations

Schneider Electric C60PV-DC

The C60PV-DC is a DC circuit breaker dedicated to multi string for PV installations with Voc until 650 V.
It isolates PV strings and protects them from reverse current. The C60PV-DC is not polarity sensitive.
- Three ratings: 10, 16, and 20 A

Schneider Electric Compact NS DC circuit breaker

The Compact NS DC is a DC circuit breaker dedicated to multi-array photovoltaic installation with Voc until 750 V (please consult for higher voltage). It isolates PV sub-arrays and protects them from reverse current.
- Ratings from 80 A to 250 A (four poles)

Schneider Electric Masterpact NW DC

The Masterpact NW DC is the worldwide benchmark for high-current circuit-breakers. The Masterpact NW circuit-breaker range features optimised dimensions. This unit meets requirements from 4000 to 6300 A. At a time when installations are becoming increasingly complex, Masterpact NW enables standardisation of electrical switchboards by providing unrivalled simplicity in terms of both choice and installation.

Schneider Electric NSX DC PV

The Compact NSX is the next-generation circuit breaker. A power monitoring unit enhances its protective functions.
For the first time, users can monitor both energy and power, offering new performance in a remarkably compact device.

DC main switch for photovoltaic installations

Schneider Electric C60NA-DC

The C60NA-DC is an un-polarized DC switch disconnector dedicated to array isolation and control with Voc until 650 V. When fuses are provided for overcurrent protection, the use of C60NA-DC is required.
- Operating current and voltage: 20 A - 650 V; 30 A - 500 V; 40 A - 400 V; 50 A - 300 V

Schneider Electric INS PV-1

The INS PV-1 is a DC switch disconnector dedicated to array isolation and control with Voc until 600 V.
Designed for maximum performance and safety for PV applications, this product operates with a wide choice of accessories and auxiliaries.
- Operating current and voltage: 10 A - 600 V; 25 A - 500 V; 32 A - 400 V

Schneider Electric Compact NS DC switch disconnector

The Compact NS DC switch disconnector is designed for DC Voltage up to 750 V (please consult for higher voltage). It is dedicated to array isolation or as a main DC switch. For PV installation this product operates with four-pole basic frames equipped with accessories (phase barrier, pole connections, rotary handle etc.).

Protection against lightning strikes

Schneider Electric PRD-DC surge arresters

The PRD-DC direct current surge arrester is designed to help protect PV panels and the DC input to the inverter from over-voltages due to a lightning strike. It should be installed in an enclosure, weatherproof if installed outside. The withdrawable PRD-DC allows damage cartridges to be replaced quickly.
- Ratings: 40 kA, 600 and 1000 V
- We recommend this product to be used with mini-Kaedra enclosures

Schneider Electric AC surge arresters with built-in disconnector

A large range of AC surge arresters are designed to help protect your PV installation against lightning induced surges. Each surge arrester in the range has a specific use:
- High risk level: with max. 40 kA (Quick PRD 40r single-phase and three-phase)
- Moderate risk level: with max. 10, 12.5, 20 kA (PF'clic, Quick PRD 20r single-phase and three-phase)

Schneider Electric TeSys DF PV

Simple and effective protection. Fuse protection is a reliable and effective solution to protect your low voltage equipment against short-circuits that can cause major damage to your installations and generate risk for equipment and personnel, as well as significant production losses.

Alternating current (AC)
The type of electricity supplied by the utility company. The unique characteristic of this form of electricity is that it reverses direction at regular intervals. For example, 230 V 50 Hz power reverses flow 50 times a second, hence the rating 50 Hz (cycles).

Amp (A)
A unit of measure of the flow of electrical current.

Amp hour (Ah)
One amp of electrical current flowing for one hour. The unit Ah is an expression of the capacity (size) of a battery.

Current
The rate of flow of electric charge, usually expressed in amps (or amperes).

Direct current (DC)
The type of electricity stored in batteries and generated by solar electric devices. Current flows in a single direction.

Electrolyte
A conductive medium in which the flow of electricity takes place; this is the liquid found inside storage batteries.

Grid
When used in reference to utility power, it refers to a system of electrical transmission and distribution lines.

Ground fault protection (GFP)
A shock hazard protection device that limits the flow of electrical current to earth. Usually required in wet locations, e.g. for outdoor, kitchen, and bathroom circuits.

Hertz (Hz)
The frequency, or number of times per second, that the flow of AC electricity reverses itself. Also referred to as cycles (see alternating current).

High battery voltage protection
A control circuit that disconnects charge current flowing to the battery before voltage reaches a dangerously high threshold. Prevents damage created by excess gassing (or boiling) of electrolyte.

Idle current
The amount of electrical current required to keep an inverter ready to produce electricity on demand.

Inrush current
The peak current an appliance or tool will draw at the instant it starts up.

Kilowatt (kW)
One thousand Watts of electricity. Ten 100 Watt light bulbs use one kW of electrical power.

Kilowatt hour (kWh)
One kW of electrical power used for one hour. Most grid connected electrical meters measure kWh for billing purposes.

Line loss
A voltage drop caused by resistance in wire during transmission of electrical power over distance.

Load
Any device that consumes electricity to operate. Appliances, tools, and lights are examples of electrical loads.

At Schneider Electric Renewable Energies,

customer satisfaction

is everyone's number one priority

Note